

REMARKS

The foregoing amendments and these remarks are in response to the Office Action dated February 8, 2006. Applicant hereby requests a two month extension of time to file this response. Authorization to charge Deposit Account No. 50-0951 for the appropriate fees is filed herewith.

At the time of the Office Action, claims 1, 2, 5-8 and 12-15 were pending. Claim 8 was objected to for informalities. Claim 8 was rejected under 35 U.S.C. §112. Claims 1, 2, 6, 8, 12, 14 and 15 were rejected under 35 U.S.C. §102(b). Claims 7 and 13 were rejected under 35 U.S.C. §103(a). The objections and rejections are discussed in more detail below.

I. Claim Objections

Claims 8 was objected to for informalities listed in the Office Action. The claim has been amended herein in accordance with the Examiner's suggestions, and withdrawal of the objections are thus respectfully requested.

II. Rejection to the Claims under 35 U.S.C. §112

Claim 8 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. The claim has been amended to overcome the Examiner's rejection.

III. Rejections to the claims based upon Art

Claims 1, 2, 6, 8, 12, 14 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent No. 2000-178925 to Tesac Corp. (hereafter "Tesac."). Claims 7 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tesac in view of U.S. Patent No. 1,781,458 to Gore. Applicant respectfully traverses these rejections.

With regard to the rejection in view of Tesac, Applicant first wishes to discuss the issue of the function of Tesac's knot 5. The positioning and the numeric ratio of such knots to the others existing on the net clearly point to a function which differs greatly from that of claims 1, 2 and 8. In particular, from the positioning of Tesac's knots along the edges of a given square area, the

knots 5 are not intended for enabling the corresponding net junctions to act as a direct barrier to or containment of falling rocks or avalanches. Therefore, they cannot act in a retaining net, as recited by claims 1, 2 and 8.

Instead, the Tesac knots appear to serve the function of allowing for rearrangement of the corresponding intersecting ropes with respect to one another whenever any outwards strain from beneath the net causes the bulging of the particular net surface area which they define. Such rearrangement, which is achieved by the sliding of one rope with respect to the other, helps maintain the net in a spread out form and helps absorb any sudden impact that would otherwise break the net apart. In order for such sliding to be possible, the intersecting ropes must meet at the junctions in a fairly loose fashion, which is afforded by and consistent with the relative distance between the two U elements, with respect to the diameter of the ropes, found in the knot of such document, which is considerably greater than the one contemplated in the pending claims. With such a relatively large distance between the U elements in the knot by Tesac, the intersecting ropes must remain fairly loose, or at least capable of sliding along each other, given the appropriate amount of upward pressure from beneath the retaining net.

The present claims, recite a knot that does not allow any such sliding to occur. The structure allows the net to remain tightly adherent on its intended surface (e.g. a mountainous slope) across its entire area, so that it can withstand any outward pressure from beneath the net. It is therefore important that the intersecting ropes remain tightly bound to one another under all the expected conditions of outward pressure.

To achieve the structure, the knot, and in particular the distance between the two U elements of the knot with respect to the diameter of the rope, has been carefully worked out so that, once the knot is tightly secured onto the net, no relative movement of the ropes is possible. This result is achieved by a merging of the intersecting ropes into one another, in such a way that no sliding on the plane of the net can occur between intersecting ropes, at the junction.

This structure of the knot forces the strands of the one rope to accommodate for the merging of those of the other rope, thus creating an effective and strong junction in which the overall thickness of the intersecting ropes is not much different to the diameter of a single rope.

Moreover, by virtue of such merging of the strands, free movement of one rope with respect to the other is no longer possible.

As can be clearly seen by comparison of figures 10(a) and (b) of Tesac with figures 3 to 9 of the present application, the knots in question differ in their structure. In particular, it is clear from an analysis of the above-mentioned figures that, whereas the distance between adjacent bolts securing the U elements of the document by Tesac is fairly arbitrary, and, according to the figures, considerably larger than the diameter of the ropes they secure, both the space created by the U-elements astride a rope of the present invention and the space created by the distance between the U-elements are necessarily filled up by the one rope and its intersecting rope respectively. It is by virtue of this difference that the interaction between the intersecting net ropes is entirely different in the two knots: the knot by Tesac, in fact, necessarily includes many gaps in which the ropes are free to move and shift around; on the other hand, the knot of the claims 1, 2 and 8 exhibit absolutely no gaps at all once it has been duly tightened, and is therefore an absolutely strong knot.

In the first case, the forces generated by the U-elements are located at a distance from the ropes and are dissipated across a wider area. In the case of claims 1, 2 and 8, the knot is as compact as can be and the forces generated by the U-elements cannot be dissipated but are instead, concentrated and directly active on the ropes they tightly enclose.

The result is a net junction in which the ropes can no longer slide along one another, and the corresponding knot thus poses a firm resistance to any outward pressure. This in turn leads to the formation of a very secure net, in which none of the junctions are intended to yield under outwards pressure from beneath the net. By distributing such type of knots at each and every junction of the ropes of the net, the performance of the net is considerably improved compared to the prior art, and in particular compared to the net contemplated by Tesac.

Thus, the claims of the present application are patentable over Tesac. Nevertheless, Applicant has amended claims 1, 2 and 8 to recite that the curvature of the curved bases is semicircular, with an intrados radius of approximately one half the rope diameter. This is clearly not shown by Tesac, which has flattened links (see particularly Figs. 6, 13(c) and 14(a) of Tesac). Furthermore, Tesac does not teach or suggest a preferred rope diameter or rope diameter ratio with respect to the U-element intrados radius.

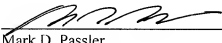
For the foregoing reasons, claims 1, 2 and 8 are believed to be in condition for allowance. The dependent claims are also believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

IV. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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